CLAIMS

1. An integrated radio tower light controller and alarm reporting device, said device comprising:

 a. a current sensing module monitoring AC current distributed to one or more beacons and one or more lights, said module reporting one or more alarm modes associated with said beacons and lights via one or more alarm units;

 b. a flasher module flashing said one or more beacons at a pre-determined flash rate and reporting one or more of said alarm modes via said one or more alarm units if any of said beacons fail to flash at said pre-determined flash rate;

 c. a first mechanical relay for reporting failure in said flasher module via said one or more alarm units; and

 d. a second mechanical relay for reporting failure in said current sensing module via said one or more alarm units.

2. An integrated radio tower light controller and alarm reporting device, as per claim 1, wherein said device further comprises diodes placed across said alarm units for isolation in conjunction with a failure in AC power.

3. An integrated radio tower light controller and alarm reporting device, as per claim 2, wherein said diodes are peak inverse voltage (PIV) diodes.

4. An integrated radio tower light controller and alarm reporting device, as per claim 1, wherein said current sensing module and said flasher module are solid-state modules.

5. An integrated radio tower light controller and alarm reporting device, as per claim 4, wherein said device is compatible with existing tower light controllers and made functional via replacing electromechanical current sensing module or electromechanical flasher module in said existing tower light controllers with said solid-state current sensing module or said solid-state flasher module.

6. An integrated radio tower light controller and alarm reporting device, as per claim 1, wherein components of said system are mounted on a metal backplate that is secured in place using standoff insulators.

7. An integrated radio tower light controller and alarm reporting device, said device comprising:

a. one or more alarm units;

b. a solid-state flasher module for powering and flashing one or more beacons of a radio tower at a predetermined flash rate;

c. a solid-state current sensing device that is operatively linked to said solid-state flasher module for sensing either a failure in flashing at said predetermined flash rate or a failure in AC current, and upon sensing said failure activating said one or more alarm units; and

d. at least three solid-state current sensing device for monitoring AC current in "A" beacon, "B" beacon, and sidelights, and upon sensing failure in said monitored AC current, activating said one or more alarm units.

8. An integrated radio tower light controller and alarm reporting device, as per claim 7, wherein said one or more alarm units monitor one or more of the following components: "A" Beacon, "B" Beacon, solid-state flasher, side lights, or AC power.

9. An integrated radio tower light controller and alarm reporting device, as per claim 7, wherein said device is compatible with existing tower light controllers and made functional via replacing electromechanical current sensing module or electromechanical flasher module in said existing tower light controllers with said solid-state current sensing module or said solid-state flasher module.

10. An integrated radio tower light controller and alarm reporting device, as per claim 7, wherein components of said device are mounted on a metal backplate that is secured in place using standoff insulators.

11. An integrated radio tower light controller and alarm reporting device, as per claim 7, wherein said device further comprises diodes placed across said alarm units for isolation in conjunction with a failure in AC power.

12. An integrated radio tower light controller and alarm reporting device, as per claim 11, wherein said diodes are peak inverse voltage (PIV) diodes.

13. A method for replacing a pre-existing radio tower light controller with an integrated tower light controller and alarm reporting device, said pre-existing radio tower light controller comprising electromechanical flasher modules and electromechanical current sensing modules, said method comprising the steps of:

a. replacing said electromechanical flasher module with a solid-state flasher module for powering and flashing one or more beacons of a radio tower at a predetermined flash rate;

b. replacing said electromechanical current sensing modules with a solid-state current sensing device that is operatively linked to said solid-state flasher module for sensing either a failure in flashing at said predetermined flash rate or a failure in AC current, and upon sensing said failure activating one or more alarm units; and

c. installing at least three solid-state current sensing device for monitoring AC current in "A" beacon, "B" beacon, and sidelights, and upon sensing failure in said monitored AC current, activating said one or more alarm units.

14. A method for replacing an pre-existing radio tower light controller with an integrated tower light controller and alarm reporting device, said pre-existing radio tower light controller comprising electromechanical flasher modules and electromechanical

current sensing modules, as per claim 13, wherein said method further comprises the step of placing one or more diodes across each of said alarm units for isolation in conjunction with a failure in AC power.

15. A method for replacing an pre-existing radio tower light controller with an integrated tower light controller and alarm reporting device, said pre-existing radio tower light controller comprising electromechanical flasher modules and electromechanical current sensing modules, as per claim 14, wherein said diodes are peak inverse voltage (PIV) diodes.

16. A method for replacing an pre-existing radio tower light controller with an integrated tower light controller and alarm reporting device, said pre-existing radio tower light controller comprising electromechanical flasher modules and electromechanical current sensing modules, as per claim 13, wherein said method further comprises the step of mounting components of said controller on a metal backplate that is secured in place using standoff insulators.